

DETAILED ACTION

Priority

1. Acknowledgment is made of Applicant's claim for foreign priority based on an application filed in Japan on 27 July 2004. It is noted, however, that Applicant has not filed a certified copy of the JP 2004-241680 application as required by 35 U.S.C. § 119(b), nor has one been received from the International Bureau (IB).

Information Disclosure Statement

2. The examiner has considered the Information Disclosure Statements (IDS) filed on 09 June 2006 and 03 May 2011. A copy of the portion of the IDSs listing the references is being returned to the Applicant along with this Office action and serves, both as acknowledgement of receipt of the IDSs, and as an indication as to which references the examiner considered.

Election/Restriction

3. Applicant's election without traverse of Group I, claims 1 to 11, in the reply filed 29 July 2011 is acknowledged. Accordingly, claims 1 to 11 are examined and claim 12 is withdrawn from further consideration pursuant to 37 C.F.R. § 1.142(b) as being drawn to a non-elected invention.

4. In the reply filed 29 July 2011, Applicant cancelled claims 1 to 6 and 12. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 C.F.R. § 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any

amendment of inventorship must be accompanied by a request under 37 C.F.R. § 1.48(b) and by the fee required under 37 C.F.R. § 1.17(i).

Claim Rejections - 35 U.S.C. § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. § 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 7 to 11 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. Claims 7 to 11 recite the limitation “a rotational axis which is located coaxially with the outer cylinder and discharges the liquid material while forming the liquid material to fine particles”. A rotational axis is merely a straight line about which a body rotates. Therefore, it is unclear how a rotational axis can discharge anything, let alone liquid material in the form of fine particles.

Claim Rejections - 35 U.S.C. § 103

8. The following is a quotation of 35 U.S.C. § 103(a) that forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 7 to 11 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Darrah (U.S. Pat. No. 1,501,527), cited in the Supplementary European Search Report (ESR) dated 01

February 2011 and in the IDS filed 03 May 2011, in view of Perry *et al.* (U.S. Pat. No. 0,019,610).

10. Regarding claims 7 and 10, Darrah teaches a mixer and process for making bread comprising a rotating outer cylinder (mixing bowl, 6) and a coaxial channel (9) through which liquid material formed into fine particles (in the form of air containing brine or other liquids) is introduced. Darrah also teaches beater arms (12, 13) that revolve around the rotation axis and meet the claimed limitation of a “fin” (Darrah at Figure 1). Darrah does not teach that the fin has side faces in a direction of revolution of the fin, each of which forms an inclined face such that a width of the fin becomes wider from an inner surface to an outer surface of the fin.

11. Mixing fins come in all shapes and sizes, and those in which the fin has side faces in a direction of revolution of the fin, each of which forms an inclined face such that a width of the fin becomes wider from an inner surface to an outer surface of the fin, are notoriously well known. For example, Perry *et al.* teach a machine for raising dough, the machine containing blades having side faces in a direction of revolution of the blade, each blade forming inclined face such that the width of the blade becomes wider from an inner surface to an outer surface of the blade (Perry *et al.* at Figure 2). The simple substitution of one known element (the mixing fin shape of Darrah) for another (the mixing fin shape of Perry *et al.*) to obtain predictable results (the mixing of dough) is *prima facie* obvious. M.P.E.P. § 2141.

12. Regarding claims 8 and 9, it is well within the abilities of one of ordinary skill in the art, without undue experimentation, to arrange the fin to meet any required design needs. In other words, the location and arrangement of the fin is merely a design choice.

13. Regarding claim 11, Darrah teaches that the beater arms (12, 13) have a number of perforations (14) (Darrah at lines 55-57). The arrangement and number of through holes is merely a design choice, well within the abilities of one of ordinary skill in the art using only routine experimentation. Finally, the manner in which the liquid flows is merely a manner of operating the claimed device, which does not patentably distinguish the claimed device from the prior art. M.P.E.P. § 2114.

Conclusion

No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GAUTAM PRAKASH whose telephone number is 571-270-3030. The examiner can normally be reached on Monday, Tuesday, Thursday, and Friday from 8:30 am to 7:00 pm, Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Marcheschi can be reached on 571-272-1374. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, go to <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, please contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit: 1775

If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, please call 800-786-9199 (in USA or CANADA) or 571-272-1000.

/G.P./

Examiner, Art Unit 1775

/Nathan A Bowers/

Primary Examiner, Art Unit 1775